

JENNIFER M. GRANHOLM GOVERNOR KIRK T. STEUDLE DIRECTOR

November 26, 2008

Mr. John D. Niemela Director County Road Association of Michigan P.O. Box 12067 Lansing, Michigan 48901-2067

Mr. David Worthams Transportation Environmental Affairs Michigan Municipal League 320 N. Washington Sq., Ste. 100 Lansing, Michigan 48933-1288

Dear Mr. Niemela and Mr. Worthams:

## Fiscal Year 2010 and 2011 Federal Local Safety Program

The Michigan Department of Transportation (MDOT) is pleased to announce the solicitation of new candidate project applications for fiscal years (FY) 2010 and 2011 Local Safety Program. Federal funds for the Local Safety Program are to be used for highway safety improvements on the local roadway system. The FY 2010 and FY 2011 budget for this program is estimated at \$15,187,500 (\$12,150,000 federal and \$3,037,500 local match) for each year. This amount may be subject to revisions based on approval of the future federal highway bill. We are asking the County Road Association of Michigan and the Michigan Municipal League to distribute this notice to their member agencies.

MDOT will be programming projects for both FY 2010 and FY 2011 with the current call for projects. Local agencies are allowed to submit more than one project for consideration. Agencies submitting multiple projects should submit a prioritized list for consideration. If you have a specific year which you want your project selected for, please denote this on your application, otherwise your project will be programmed in order of the project's priority amongst the overall program project submittals. Selected safety projects are to be obligated in the fiscal year which the project is selected. FY 2010 projects will need to be developed and obligated on or before August 27, 2010. FY 2011 projects will need to be developed and obligated between October 1, 2010 and August 26, 2011.

Program administrative procedures for fiscal years 2010 and 2011:

1. The construction phase only is eligible for federal aid, except as specified in items #5 and #6. Any costs related to right of way, design and construction engineering, or work on state owned roadways are not eligible for local safety program funds. Projects are federally funded at 80 percent with a 20 percent local match. Federal funds shall not exceed \$400,000 per project. Projects will also be capped at the lesser of the original estimate plus \$20,000 or the original estimate plus 20 percent. Projects may, at MDOT's discretion, be funded by a "Pro-Rata" or "Lump Sum" method. Please see

http://www.michigan.gov/mdot/0,1607,7-151-9625\_25885\_27578---,00.html to review information on the "Pro-Rata" or "Lump Sum" funding methods. The projects are to be let by MDOT, or performed by local force account, as approved by our office. Force account work shall follow the local agency guidelines for "Construction by Non-Competitive Bid Contract" which can be viewed on the MDOT/Local Agency website at <a href="http://www.michigan.gov/mdot/0,1607,7-151-9625\_25885\_40414---,00.html">http://www.michigan.gov/mdot/0,1607,7-151-9625\_25885\_40414---,00.html</a>. Any locally controlled roadway, regardless of National Functional Classification, is eligible for the Local Safety Program.

- 2. Eligible projects must meet current standards and warrants and current ADA requirements. Project types may include replacement, installation or elimination of guardrail, removal of fixed objects from clear zones, traffic and pedestrian signal optimization, installation, and upgrades, access management, horizontal and vertical curve modifications, sight distance and drainage improvements, bridge railing replacement or retrofit, roadway intersection improvements to improve safety, mid-block pedestrian crossings, improvements to school zones, shoulder and center line rumble strips, and improved permanent signing and pavement markings. This list is not all inclusive and other types of safety improvement projects can be submitted for consideration.
- 3. All project candidates must be postmarked no later than **Friday, March 27, 2009**. Projects postmarked after March 27, 2009, at MDOT's discretion, may or may not be reviewed for funding based on the strength of other submitted projects and the availability of funds. It is recommended that your application be submitted by certified mail or other trackable delivery service. Projects are reviewed and approved by committee and selected based on criteria which includes:
  - A. Submit crash history with supporting UD-10s for all "K", "A" and "B" crashes and for any other lesser severity of injuries that supports the scope of work for the area, within the most current 5 year period of available data.
  - B. Roadway classification, traffic crash analysis, ADT, collision diagrams, crash concentration, etc.
  - C. Existing condition and character of proposed work.
  - D. Metropolitan Planning Organization (MPO) or Rural Task Force (RTF) endorsement and priority ratings.
  - E. Overall safety benefits of the proposed work, American Association of State Highway and Transportation Officials (AASHTO) guidelines, and Michigan Manual of Uniform Traffic Control Devices (MMUTCD) warrants.
  - F. Completion of Time of Return or Benefit/cost analysis with supporting documentation and calculations supplied to MDOT.
  - G. Project coordination with other construction projects.
  - H. Ability to deliver a complete construction package for letting within the fiscal year.

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- I. Statewide and historical funding distribution.
- J. Past history of delivering safety projects in the year the project was selected.
- K. Completion of the enclosed MDOT Form #1627 (10/08) for every project submitted. This form can also be found on the MDOT/Local Agency web site at <a href="http://mdotwas1.mdot.state.mi.us/public/webforms/">http://mdotwas1.mdot.state.mi.us/public/webforms/</a>

At a minimum, the suggested format for project funding consideration is an engineering report that clearly identifies the route, location (township(s)/municipalities), project termini and length, existing and proposed cross sections, estimated project cost and each of the criteria listed above. The calculations and supporting documentation must be submitted for the time of return analysis, and/or the benefit to cost ratio. A map must be included with the report which clearly identifies the location of the proposed project. Pictures, graphics, preliminary plans, etc., included in the engineering report can also be used as supporting evidence and are encouraged.

Enclosed is a sheet listing MDOT accepted crash reduction factors for commonly submitted scopes of work and injury costs. Also listed are acceptable reference sources for obtaining crash reduction factors for projects with scopes of work that are not provided. This enclosure is posted on the MDOT/Local Agency web site, under the Safety/HRRR tab, which can be located at <a href="http://www.michigan.gov/mdot/0,1607,7-151-9625">http://www.michigan.gov/mdot/0,1607,7-151-9625</a> 25885 40552---,00.html.

For TOR and/or B/C analysis calculations, MDOT will be using the 2006 National Safety Council average economic costs for motor vehicle injuries. The following injuries will be counted separately: 'K', 'A', and 'B' type injuries, while 'C' and 'PDO' type injuries will be counted as a 'PDO' type injury. This information can be found at <a href="http://www.nsc.org/resources/issues/estcost.aspx">http://www.nsc.org/resources/issues/estcost.aspx</a> MDOT has an Excel spreadsheet available for calculating Time of Returns and Benefit/Cost analysis. If you have any questions or would like to obtain a copy of MDOT's Excel spreadsheet for calculating Time of Returns and Benefit/Cost analysis, please contact Jim D'Lamater at (517) 335-2224 or email at dlamaterj@michigan.gov.

- 4. If there are any social, economic and environmental impacts within the project limits, all impacts must be mitigated before federal funds can be appropriated and obligated. Project applications which are expected to have significant public controversy and/or require an environmental assessment will not be considered until these outstanding issues have been resolved.
- 5. The FY 2010 and FY 2011 Safety Program is establishing financial goals that will be used to fund specific types of projects. The project type and financial goals are listed below.

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Project Type	Total Program
Centerline and Shoulder Rumble Strip	\$200,000
Traffic signal optimization (all red phase)	\$250,000
Guardrail Upgrades and Clear Zone	
Improvements	\$1,000,000
Projects with scopes that directly correct areas	\$9,750,000
with a concentration of Types "A" and "K"	
crashes	

To aid local agencies to identify areas of roadways that have types "K" and "A" crashes, MDOT will post region maps with the location of the crashes in the Safety area of the MDOT/Roads and Travel website <a href="http://www.michigan.gov/mdot/0,1607,7-151-9615">http://www.michigan.gov/mdot/0,1607,7-151-9615</a> 11261---,00.html

The category Traffic Signal Optimization has been set up so traffic signal optimization studies can be completed and implemented. Preliminary Engineering will be considered as a participating cost (80% Federal / 20% Local) for the analysis and adjusting of timing of signal controllers. As part of the traffic signal optimization study and adjustment, signals should be studied to allow for a minimum one second all red phase and the yellow change interval phase evaluated to meet current guidelines. A maximum of \$5,000.00 total cost will be allowed per signal location, for the analysis and adjustment of signal controllers. Safety funds will not be allowed to be used for signal component upgrades under this category. It is anticipated this work would be done via Force Account work by the local agency

6. A Federal Highway Administration website contains reports provided by the states in response to a federal requirement to describe at least 5 percent of the locations in each state currently exhibiting the most severe highway safety needs, in accordance with Sections 148(c)(1)(D) and 148(g)(3)(A), of Title 23, *United States Code*. This website (go to <a href="http://safety.fhwa.dot.gov/fivepercent/index.htm">http://safety.fhwa.dot.gov/fivepercent/index.htm</a> and then select "Michigan") currently has the 2006 and 2007 5 Percent Reports. The 2008 5 Percent Report should be added to the website by mid-December, 2008. In addition to funding the construction project in the areas listed on the 2006 - 2008 5 Percent Reports, MDOT will also consider funding preliminary engineering up to 10 percent of the estimated eligible construction costs to be participating costs (80% Federal / 20% Local). Projects that are on the 5 Percent Report must be clearly identified and the estimated preliminary engineering costs listed in the application if the agency desires to have the preliminary engineering costs funded.

Once projects are selected, local agencies within MPO areas must coordinate with their MPO to ensure inclusion of their project in the area's Transportation Improvement Program (TIP) for the fiscal year which the project was selected for. Those agencies that are part of a rural task force should notify their members that they are applying for these funds. Rural task force approval is

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not necessary. Local Agency Programs will coordinate with MDOT Planning to ensure these projects are included in the State Transportation Improvement Program (STIP). Each application is evaluated based on the criteria listed above on a project by project basis and funding availability.

Please send all eligible projects and supporting information by March 27, 2009, to the following:

Mr. Jim D'Lamater, P.E., Safety Engineer Design Division, Local Agency Programs Unit 425 W. Ottawa Street, P.O. Box 30050 Lansing, Michigan 48909-7550

Depending upon funding availability, project selection and announcements are made as soon as possible with notifications and project programming instructions sent through each of the coordinating agencies. Our goal is to maintain a fiscally constrained program while maximizing the use of available federal funds.

If you have any questions, please feel free to contact Jim D'Lamater at (517) 335-2224 or at dlamaterj@michigan.gov.

Sincerely,

Rudolph S. Cadena, P.E.

Local Agency Programs Engineer

Local Agency Programs

for Mark A. Van Port Fleet Engineer of Design

**Enclosures** 

Michigan Department of Transportation 1627 (10/08)

## LOCAL AGENCY PROGRAMS SAFETY PROJECT SUBMITTAL FORM

FUNDING TEMPLATE:		FISCAL YEAR:	
LOCAL AGENCY		LOCAL AGENCY CONTACT	
PHONE NO.	FAX NO.	EMAIL ADDRESS	
ALTERNATIVE CONTACT		PHONE NO.	FAX NO.
EMAILADDRESS		HOUSE DISTRICT	SENATE DISTRICT
PROPOSED PROJECT LOCATIO	N, LIMITS AND PROJECT DESCRIPTI	ON	
PROPOSED COST	TIME OF RETURN (YEARS)	IMPROVEMENT CATEGORY (CHE	CK THE CATEGORY THAT APPLIES)
BENEFIT TO COST RATIO	TOWNSHIP/CITY	Intersection Improvements	
PLEASE LIST THE CRASH REDUCTION FACTORS USED:		Roadway and Structure Improvements  Roadside Improvements	
DOES A PROJECT IMPACT A SCHOOL OR OTHER SENSITIVE ORGANIZATION? PLEASE DESCRIBE:		Pedestrian and Bicycle Improvements  Other	
ROADWAY DATA		CROSS ROAD DATA (If an inte	ersection improvement)
PRIMARY ROUTE NAME		ROUTE NAME	
ADT		ADT	
PERCENT COMMERCIAL	*NO. OF CRASHES	PERCENT COMMERCIAL	*NO. OF CRASHES
* NO, OF FATAL CRASHES	*NO. OF "A" TYPE CRASHES	*NO. OF FATAL CRASHES	*NO. OF "A" TYPE CRASHES
*PERIOD OF CRASH DATA	FUNCTIONAL CLASSIFICATION	*PERIOD OF CRASH DATA	FUNCTIONAL CLASSIFICATION
*Please attach Crash Summary an	d UD-10's to your project submittal with	the most recent 5 years of available d	ata.
EXPLANATION OF HOW THE PR	OPOSED IMPROVEMENT WILL IMPRO	OVE SAFETY AND REDUCE CRASHI	ES
HAS YOUR LOCAL AGENCY REC	EIVED APPROVAL OF A SAFETY PRO	<u></u>	
YEARS?	□ NO □ SAFETY PRO	_	
YEARS?  IF YES, HAVE ALL PROJECTS BE	NO SAFETY PRO	_	

## **Safety Improvements and Crash Reduction Factors**

Proposed Improvement	Projected Crash Reduction	
Horizontal Curve Flattening	30% Reduction: Head-On, Sideswipe, Fixed-Object, Overturn	
Superelevation Modification	20% Reduction: Head-On, Sideswipe, Fixed-Object, Overturn	
Vertical Curve Modification	20% Reduction: Head-On, Sideswipe	
	10% Reduction: Fixed-Object, Overturn	
	80% Reduction: Rear-End Left-Turn	
Construct Center Left-Turn Lane	50% Reduction: Head-On Left-Turn	
	20% Reduction: Head-On, Angle, Other*  15% Reduction: Non Left-Turn Rear-End	
	65% Reduction: Rear-End Right-Turn	
Construct Right-Turn Lane	20% Reduction: Non Right-Turn Rear-End, Sideswipe-Same Direction	
Intersection Improvements (Realignment,	30% Reduction: Angle	
Sight-Distance Improvements,	15% Reduction: Rear-End	
Radii Improvements, Etc.)	10% Reduction: Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related	
Install/Upgrade Flashing Traffic Signals	30% Reduction: All Crash Types	
Install/Upgrade Pedestrian Signals	30% Reduction: Pedestrian, Bicycle	
Install Guardrail	55% Reduction: Fatalities and "A" Injuries	
Slope Flattening	15% Reduction: Fixed-Object, Overturn	
Widen Shoulders to Standard Width	15% Reduction: All Crash Types	
Improve/Upgrade Signing and	30% Reduction: Angle, Rear-End	
Pavement Markings at Intersections	10% Reduction: Head-On, Pedestrian	
Install/Upgrade Signing/Delineation on Horizontal Curves	20% Reduction: Head-On, Sideswipe, Fixed-Object, Overturn	
Remove Fixed-Objects From Clear Zone (Trees, Culverts, Etc.)	75% Reduction: Fixed-Object Crashes	
Install Centerline Rumble Strips	55% Reduction: Sideswipe-Opposite, Head-On	
Install Shoulder Rumble Strips	25% Reduction: Fixed-Object, Overturn	
Construct Roundabout	76% Reduction: Fatalities and "A" Injuries 39% Reduction: Minor & PDO Crashes	
Construct Sidewalk for Pedestrians	85% Reduction: Pedestrian Crashes	
Improve Access Management	10% Reduction: Angle, Rear-End	
Provide All-Way Stop-Control Operation at Intersection	60% Reduction: All Crash Types	
Operation at intersection	<u> </u>	

<sup>\* &</sup>quot;Other" includes any other crash which might be mitigated by the addition of a center left-turn lane in the judgement of the crash analyst.

## **REFERENCES:**

The references listed below are the sources recognized by MDOT for obtaining crash reduction factors. If you have a situation that none of these sources can provide a crash reduction factor for, please contact Jim D'Lamater, P.E., MDOT Local Agency Programs Safety Engineer, at 517-335-2224, for review and approval to use alternative reference sources.

- 1). MDOT Safety Programs Unit Crash Reduction Factors (As recommended by K. Kunde, P.E.); October, 1986.
- 2). Selection Process for Local Highway Safety Projects Transportation Research Record 847; 1982.
- 3). UKTRP 85-6, University of Kentucky; March, 1985.